

AMENDED

Serial No.

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE
STATE OF NEVADA HERETOFORE APPROPRIATED**

AUG 11 1988

Date of filing in State Engineer's Office

SEP 16 1988

Returned to applicant for correction

SEP 27 1988

Corrected application filed

Map filed OCT 13 1988 under 52411

The applicant OXBOW GEOTHERMAL CORPORATION200 S. Virginia St., Suite 450 of Reno

Street and No. or P.O. Box No.

City or Town

Nevada89501

State and Zip Code No.

hereby make.... application for permission to change the

Point of Diversion and Place of Use

Point of diversion, manner of use, and/or place of use

of water heretofore appropriated under Permit #41920

(Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and

identify right in Decree.)

1. The source of water is Dixie Valley Geothermal Reservoir (underground)
Name of stream, lake, underground spring or other source.
2. The amount of water to be changed 3.25 cfs
Second feet, acre feet. One second foot equals 448.3 gallons per minute.
3. The water to be used for Industrial
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
4. The water heretofore permitted for Industrial
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
5. The water is to be diverted at the following point within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 7, T24N
Describe as being within a 40-acre subdivision of public survey and by course and
R37E MDBM, or at a point from which the Northeast corner of Section
distance to a section corner. If on unsurveyed land, it should be stated.
7, T24N R37E, MDBM bears, N 29° 40' 39" E 1131.89 feet
6. The existing permitted point of diversion is located within NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 18, T24N R37E,
If point of diversion is not changed, do not answer
MDB&M, or at a point from which the NW corner of Section 5, T24N
R37E MDB&M bears, N 05° 54' 38" E a distance of 13, 640.4 feet
7. Proposed place of use NE $\frac{1}{4}$ of Section 7, T24N R37E MDM
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.
8. Existing place of use Section 32, T25N R37E MDB&M, Sections 4, 5, 6, 7, 8,
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
17, 18, 19, 20, 21, T24N R37E MDB&M, Sections 12, 13, 24 T24N R36E
manner of use of irrigation permit, describe acreage to be removed from irrigation.
MDB&M
9. Use will be from January 1 to December 31 of each year.
Month and Day Month and Day
10. Use was permitted from January 1 to December 31 of each year.
Month and Day Month and Day
11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and
specifications of your diversion or storage works.) Geothermal well will be cased with 20"
Static manner in which water is to be diverted, i.e., diversion structure, ditches,
casing to 1200', 13 3/8" to 6850', 9 5/8" to the top of the Jurassic
formation, and 8 1/2" open hole to production. Fluid will be piped
pipes and flumes, or drilled well, etc.
to plant.
12. Estimated cost of works \$2 Million
13. Estimated time required to construct works 2 months

14. Estimated time required to complete the application of water to beneficial use 1 year
15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

Well will provide geothermal fluid to Dixie Valley Power Plant as the pressure in existing well declines. Total consumptive use of the reservoir will not exceed that already permitted for existing wells.

By /s/ Bruce D. Bargaen, Agent
160 Hubbard Way
Reno, Nevada 89502

Compared mpm/ bp/se

Protested _____

APPROVAL OF STATE ENGINEER

This is to certify I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion and place of use of the waters of an underground source as heretofore granted under Permit 41920 is issued subject to the terms and conditions imposed in said Permit 41920 and with the understanding that no other rights on the source will be affected by the change proposed herein.

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

The production and injection well are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the (CONTINUED ON PAGE 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 3.25 cubic feet per second, but not to exceed a consumptive use of 235 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before November 21, 1990

Proof of completion of work shall be filed before December 21, 1990

Application of water to beneficial use shall be made on or before November 21, 1991

Proof of the application of water to beneficial use shall be filed on or before December 21, 1991

Map in support of proof of beneficial use shall be filed on or before N/A

Completion of work filed OCT 5 1989 IN TESTIMONY WHEREOF, I PETER G. MORROS,

Proof of beneficial use filed FEB 06 1991 State Engineer of Nevada, have hereunto set my hand and the seal of my

office, this 22nd day of September,

Cultural map filed _____

Certificate No. 12914 Issued JUL 26 1991 A.D. 19 89

State Engineer

(PERMIT TERMS CONTINUED)

injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with the Proof of Completion.

An annual report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for the calendar year. This report must detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 2353 acre-feet per year but the total combined consumptive use of the geothermal fluid under permits 41929, 43050, 43052, 46951, 47142, 47322, 47323, 48932, 48933, 48934, 48935, 49572, 49573, 49644, 49802, 49803, 50753, 51029, 51030, 51031, 51032, 51033, 51034, 51035, 51036, 52411, 52412 and 52951 shall not exceed 10,704 acre-feet annually. The State Engineer does not waive the right to make a determination of consumptive use at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

